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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Carole Lepilleur et al. Examiner:

Serial No: Group Art Unit:

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For: TOUGHENED VINYL ESTER RESINS

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INFORMATION DISCLOSURE STATEMENT

Sir:

This invention relates to a vinyl ester resin is derived from the reaction of an unsaturated acid with an epoxy terminated polymer made from a dithio or a trithio initiator, and optionally from an epoxy resin. The vinyl ester resin can be blended with a miscible toughener and a diluent to provide a time stable system and subsequently crosslink to provide a composition with improved toughening properties.

As authorized and encouraged under 37 C.F.R. §1.97-1.99, applicant hereby cites as a means of complying with the duty of disclosure set forth in 37 C.F.R. §1.56, the following patents and/or documents, required copies enclosed, which the Examiner should consider with respect to the above-identified United States Patent Application:

PATENT/DOCUMENT NO.	DATE	NAME/COUNTRY
U.S. DOCUMENTS		
2,520,338	August 29, 1950	Robertson
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3,564,074	February 16, 1971	S.C. Avallone
3,770,698	November 6, 1973	Riew
3,892,819	July 1, 1975	Najvar
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4,530,962	July 23, 1985	Alexander
4,769,419	September 6, 1988	Dawdy
5,055,515	October 8, 1991	Backderf
5,140,068	August 18, 1992	Siebert et al.
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5,258,445	November 2, 1993	Sperk Jr., et al.
5,280,068	January 18, 1994	Siebert et al.
5,312,956	May 17, 1994	Bertsch
5,385,963	January 31, 1995	McBain et al.
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99/31144	June 24, 1999	WIPO
99/35177	July 15, 1999	WIPO
ARTICLES/OTHER DOCUMENTS		
World Polymer Congress, 37th International Symposium on Macromolecules, July 12-17, 1998, Gold Coast, Australia		
"Living Free-Radical Polymerization by Reversible Addition-Fragmentation Chain Transfer: The RAFT Process", John Chiefari, et al., CSIRO *Molecular Science, Bag 10*, Clayton South. Clayton, Victoria 3169, Australia, Received March 27, 1998, Revised Manuscript Received June 10, 1998		
"The Synthesis of Organic Trethiocarbonates[1]", H.C. Godt, Jr., and R.E. Wann, *Journal of Organic Chemistry*, 26, 4047 (1961)		
"Phase-Transfer Synthesis of Symmetrical and Unsymmetrical Dialkyl Trithiocarbonates", Iacopo Degani, et al, Synthesis, p. 894 (1986)		
"A New Form of Controlled Growth Free Radical Polymerization", Julia Kristina, et al., CSIRO, Division of Chemicals and Polymers, *Macromol, Symp.* III, 13-23 (1996)		
"One Pot Phase Transfer Synthesis of Trithiocarbonates from Carbon Disulphide and Alkyl Halides", Albert W.M. Lee, et al, *Synthetic Comm.* 18 (13), 1531 (1988)		
"A Novel One-step Synthesis of Symmetrical Dialkyl Trithiocarbonates", Man-kit Leung, et al, *Journal of Chemical Research* (S), 1995, 478-479		
"Direct Synthesis of Double Hydrophilic Statistical di- and Triblock Copolymers Comprised of Acrylamide and Acrylic Acid Units via the MADIX Process", Daniel Taton, et al, Macromol, Rapid Commun, 22, No. 18 (2001)		
"Dithiocarbamates as universal reversible addition-fragmentation chain transfer agents", M. Destarac, et al, Macromol. Rapid Commun., 21, No. 15, (2000)		
"Living Radical Polymerization with Reversible Addition – Fragmentation Chain Transfer (RAFT Polymerization) Using Ditriocarbamates as Chain Transfer Agents", Roshan T.A. mayadunne, et al., CSIRO *Molecular Science, Bag 10*, Clayton, South, Victoria 3169, Australia, Received May 3, 1999; Revised Manuscript Received August 9, 1999		

Only copies of the foreign publications and articles are included for the express purpose of providing the Patent and Trademark Office with an ample

opportunity to evaluate the same and to arrive at an independent assessment of its materiality, if any, with regard to the examination of the application.

An examination of the present application considering the above documents is requested.

Respectfully submitted,

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